

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Applicants : Hoon Chang, et al.

Group Art Unit Unknown

Appl. No. : Unknown

Filed : Herewith

For : INTERNET SERVICE PROVIDER  
SERVER SYSTEM, METHOD OF  
PROVIDING DATA, METHOD OF  
ADVERTISING USING MOVING  
PICTURES, AND RECORDING  
MEDIA THEREFOR

Examiner : Unknown

**PRELIMINARY AMENDMENT FILED WITH ORIGINAL APPLICATION**

Assistant Commissioner for Patents  
Washington, D.C. 20231

Dear Sir:

Applicants are submitting this Preliminary Amendment at the time of filing of the above-identified patent application to correct minor grammatical errors in the specification and the claims. Applicants are attaching hereto a marked-up version of the specification and claims as amended herein. The attached pages are captioned *Version with Markings to Show Changes Made*.

**IN THE SPECIFICATION:**

On page 1, between the title of the application and the heading "BACKGROUND OF THE INVENTION," insert the following new heading and new paragraph:

**RELATED APPLICATION**

The present application claims the benefit of priority under 35 U.S.C. § 119 from Korean Patent Application No. 00-34809, filed on June 23, 2000, which is incorporated by reference herein.

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Replace the single-line paragraph on page 6 at line 12 with the following paragraph:

FIG. 4 is a diagram of any one of the computer systems 3a...3n of FIG. 1;

Replace the four (4) paragraphs beginning on page 7 at line 10 and extending to page 8 at line 4 with the following four (4) paragraphs:

FIG. 1 is a schematic view of an ITSP system according to a preferred embodiment of the present invention. With reference to FIG. 1, the ITSP system comprises an ITS server system 1 and internet users' computer systems 3a...3n which are connected to the ITS server system 1 through the internet 5.

The ITS server system 1 provides an internet telephone service through the internet 5 and is a means for hosting the advertisements described in a method of advertising according to the present invention. The internet telephone service transmits voice signals through the internet 5, thus enabling long distance calls to be made via the internet 5. Internet long distance phone calls cost less than traditional long distance phone calls, and as a result, internet telephony has proved to be an attractive internet application.

The internet telephone service can be divided generally into two modes: computer-to-computer mode and computer-to-telephone mode. The computer-to-computer mode uses a method by which the ITS server system 1 takes a package of voice signals and transmits the package from one computer system to another computer system through the internet 5. The computer-to-telephone mode uses a method by which the ITS server system 1 takes a package of voice signals and transmits the package through the internet 5 from a computer system to a public switched telephone network (PSTN).

FIG. 2 is a block diagram illustrating functions of the ITS server system 1 (of FIG. 1). With reference to FIG. 2, the ITS server system 1 comprises a customer database 20, an internet telephone service database 21, a banner advertisement database 22, a moving picture advertisement database 23, and a web page database 24 as a server storage part. The ITS server system 1 is preferably divided into separate servers: an ITSP server 27, a banner advertisement server 28, and a moving picture advertisement server 29.

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Replace the four (4) paragraphs beginning on page 8 at line 21 and extending to page 9 at line 11 with the following (4) paragraphs:

The moving picture advertisement database 23 stores a multitude of moving picture advertisements that are the object data of the method of providing data according to the present invention. The moving picture advertisements are realized as real pictures having sound.

The web page database 24 stores a web page that will be transmitted to the internet users' computer systems 3a...3n and a first client program 25. The web page comprises an interface web page for displaying the internet telephone service providing screen on the display units of the internet users' computer systems 3a...3n in order to provide the internet telephone service. In the interface web page includes the second client program 26.

The second client program 26, which runs on the internet users' computer systems 3a...3n, calls a moving picture advertisement and displays the called moving picture advertisement to be synchronized with a corresponding banner advertisement on the internet telephone service providing screen. In the present example, the second client program 26 is realized using a Java applet or JavaScript; however, it may be coded using other programming languages.

The first client program 25, which runs on the internet users' computer systems 3a...3n, requests and receives a moving picture advertisement from the moving picture advertisement server 29. The first client program 25 may be made from various programming languages and is realized in the present example using an ActiveX control which is a kind of Dynamic Link Library (DLL). An ActiveX control can be created using any programming language that supports Microsoft's COM (Component Object Module), including commonly used Visual Basic and C++.

Replace the single paragraph beginning on page 9 at line 17 and extending to page 9 at line 20 with the following paragraph:

The banner advertisement server 28 extracts from the banner advertisement database 22 a banner advertisement that is requested by the second client program 26, which runs on the internet users' computer systems 3a...3n, and transmits the banner advertisement.

Replace the single paragraph beginning on page 9 at line 31 and extending to page 10 at line 4 with the following paragraph:

FIG. 4 is a schematic diagram of the computer systems 3a...3n of FIG. 1. With reference to FIG. 4, each of the computer systems 3a...3n includes a hard disk and memory as a storage part, a computer main unit 43 equipped with a processor for executing the first and second client programs 25 and 26 in connection with the hard disk and memory, a display unit 42, a keyboard 48, and a mouse 46 containing a mouse button.

Replace the single paragraph beginning on page 11 at line 14 and extending to page 11 at line 24 with the following paragraph:

FIG. 8 is a lookup table for determining an appropriate moving picture advertisement frame set corresponding to the data reception speed of an internet user's internet connection, both of which are stored in the moving picture database 23. With reference to FIG. 8, if the internet user's computer system is connected to a low speed network, such as a PSTN, and the data reception speed is "less than ooo", the smallest subdata file, moving picture frame set a, is transmitted. If the data reception speed is "ooo-\*\*\*", moving picture frame set b is transmitted. If the internet user's computer system is connected to a high speed network and the data reception speed is "more than \*\*\*", moving picture frame set c is transmitted. As such, even if internet users are connected to a low speed network, an excessive amount of time is not spent downloading the moving picture advertisement.

Replace the single paragraph beginning on page 13 at line 11 and extending to page 13 at line 20 with the following paragraph:

FIG. 12 is a flow chart explaining in detail the transmission procedure of the moving picture advertisement of FIG. 11 according to an embodiment of the method of providing data of the present invention. With reference to FIG. [12,while] 12, while the speed sensing module 51 of the first client program 25 transmitted in step 1105 (of FIG. 11) determines the data reception speed of each of the internet users' computer systems 3a...3n, the data requesting module 52 requests a moving picture advertisement list from the moving picture advertisement server 29. In

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response to the request, the moving picture advertisement server 29 transmits the moving picture advertisement list to the internet users' computer systems 3a...3n in step 1201.

Replace the single paragraph beginning on page 15 at line 3 and extending to page 15 at line 12 with the following paragraph:

FIG. 13 is a flow chart that explains the deletion procedure of the moving picture advertisement by the deleting module 53 of the first client program 25. With reference to FIG. 13, the data deleting module 53 compares the moving picture advertisements in the moving picture advertisement list received from the moving picture advertisement server 29 with the moving picture advertisements stored in the computer main unit 43. If a stored moving picture advertisement is not listed in the moving picture advertisement list, it is deleted. That way, if the advertisement period is completed or a moving picture advertisement is replaced, the moving picture advertisement that will no longer be displayed is deleted, so as to minimize storage space usage of each of the internet users' computer systems 3a...3n.

Replace the single paragraph beginning on page 15 at line 15 and extending to page 15 at line 22 with the following paragraph:

FIG. 14 is a flow chart that explains the procedures executed by the second client program. With reference to FIG. 14, the calling module 61 of the second client program 26 confirms receipt of the moving picture advertisement that has been completely downloaded by the first client program 25, and requests the banner advertisement server 28 for the banner advertisement corresponding to the downloaded moving picture advertisement in step 1401. In response to this request, the banner advertisement server 28 transmits the requested banner advertisement to the internet users' computer systems 3a...3n.

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**IN THE CLAIMS:**

A complete set of the claims is set forth below. Claims 7, 8 and 18 include the amendments discussed below. Claims 1-6, 9-17 and 19-21 remain as originally reviewed by the inventors. Applicants are attaching hereto a marked-up version of Claims 7, 8 and 18 showing the changes made by the current amendment.

1. (As Filed) A method of providing data for an internet service provider ISP server that is connected to an internet user's computer system through the internet, the method of providing data comprising the steps of:

- (a) receiving the data reception speed of an internet user's internet connection;
- (b) selecting subdata based on the received data reception speed; and
- (c) transmitting the selected subdata to the internet user's computer system.

2. (As Filed) The method of providing data of claim 1, wherein the data reception speed is detected by a speed sensing module that runs on the internet user's computer system.

3. (As Filed) The method of providing data of claim 2, wherein the data sensing module is transmitted from the ISP server and runs on the internet user's computer system.

4. (As Filed) The method of providing data of claim 1, wherein the subdata comprises a multitude of moving picture advertisement frame sets of different file sizes.

5. (As Filed) A method of advertising using moving pictures comprising the steps of:

- (a) displaying a banner advertisement in a prescribed region of a display unit of an internet user's computer system; and
- (b) displaying a moving picture advertisement, which is transmitted from an ISP server and stored in a storage part of an internet user's

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computer system, in another region of the display unit and synchronized with the banner advertisement.

6. (As Filed) The moving picture advertisement method of claim 5, wherein the banner advertisement and the moving picture advertisement are shown in respective regions of the web page which is transmitted from the ISP server.

7. (As Amended Herein) The moving picture advertisement method of claim 6, wherein the moving picture advertisement is transmitted from the ISP server, and the ISP server extracts a moving picture advertisement frame set corresponding to the data reception speed of an internet user's internet connection among a multitude of moving picture advertisement frame sets and transmits it.

8. (As Amended Herein) An ISP server system that is connected to an internet user's computer system through the internet, the ISP server system comprising:

(a) a server storage part where a multitude of subdata of different file sizes are stored; and

(b) a server part that receives a data reception speed of an internet user's internet connection, extracts from a database a predetermined subdata which corresponds to the received data reception speed, and transmits the extracted subdata to an internet user's computer system.

9. (As Filed) The ISP server system of claim 8, wherein the data reception speed is sensed by a speed sensing module running on the internet user's computer system and transmitted to the server part.

10. (As Filed) The ISP server system of claim 9, wherein the subdata comprises a multitude of moving picture advertisement frame sets of different file sizes.

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11. (As Filed) An ISP server system that is connected to an internet user's computer system through the internet, the ISP server system comprising:
- (a) a speed sensing module that comprises a server storage part where a first client program is stored and that performs on the internet user's computer system to which the first client program is transmitted and that detects the data reception speed of an internet user's internet connection; and
  - (b) a data requesting module that provides an ISP server with the data reception speed detected by the speed sensing module and that requests a prescribed data stored in the storage part of the internet user's computer system which receives the subdata, wherein the subdata corresponds to the prescribed data and is selected in consideration of the data reception speed.
12. (As Filed) The ISP server system of claim 11, wherein the data requesting module receives a data list from the ISP server and requests the data that is not stored in the storage part of the internet user's computer system among the data listed in the data list.
13. (As Filed) The ISP server system of claim 12, wherein the data requesting module stops requesting data when the internet user's computer system is in communication with the outside.
14. (As Filed) The ISP server system of claim 13, wherein the first client program further comprises a data deleting module that deletes the data stored in the storage part of the internet user's computer system but not listed in the data list.
15. (As Filed) The ISP server system of claim 14, wherein the server storage part stores a second client program which displays the transmitted data and an interface web page for providing internet service, and wherein the second client program runs on the internet user's computer system as the interface web page is transmitted to the computer system, and is equipped with a calling module for calling the corresponding data from the server storage part and a displaying module



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for displaying the moving picture called by the data calling module on a display unit of an internet user's computer system.

16. (As Filed) The ISP server system of claim 15, wherein the ISP server is a server for providing an internet telephone service, the internet service is an internet telephone service, the data is a moving picture advertisement and is displayed at a prescribed region of an internet telephone service providing screen that is displayed on the display unit of an internet user's computer system, the second client program requests a banner advertisement corresponding to a moving picture stored in the storage part of the internet user's computer system from the ISP server and receives the banner advertisement, and the displaying module displays the banner advertisement to be synchronized with the moving picture advertisement.

17. (As Filed) The ISP server of claim 16, wherein the displaying module displays the moving picture advertisement without sound when the internet telephone service is in use.

18. (As Amended Herein) A computer-readable recording medium comprising:

- (a) data sensing module for detecting a data reception speed of an internet user's internet connection; and
- (b) a data requesting module that provides the ISP server with the data reception speed of an internet user's internet connection and that receives from the ISP server a selected subdata chosen in consideration of the data reception speed among a multitude of subdata of different file sizes.

19. (As Filed) The computer-readable recording medium of claim 18, wherein the data requesting module receives a data list from the ISP server, and requests the data that is not stored in the storage part of the internet user's computer system among the data listed in the data list.

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20. (As Filed) The computer-readable recording medium of claim 19, wherein the data requesting module stops requesting data when the internet user's computer system is in communication with the outside.

21. (As Filed) The computer-readable recording medium of claim 20, further comprising a data deleting module that deletes data stored in the storage part of the internet user's computer system but not found on the data list.

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### REMARKS

The foregoing amendments to the specification and the claims correct minor grammatical and typographical errors introduced in the translation of the original Korean specification into English. No new matter is introduced by any of the amendments, and the scope of the claims remains as originally presented. Applicants respectfully request entry of the amendments.

Respectfully submitted,

KNOBBE, MARTENS, OLSON & BEAR, LLP

Dated: JUNE 22, 2001

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**VERSION WITH MARKINGS TO SHOW CHANGES MADE**

The specification and claims are amended herein as follows, wherein text between brackets (i.e., [text]) is deleted and underlined text (i.e., text) is added.

**IN THE SPECIFICATION:**

The single-line paragraph on page 6 at line 12 has been amended as follows:

FIG. 4 is a diagram of any one of the computer systems 3a...3n of FIG. 1[. 1];

The four (4) paragraphs beginning on page 7 at line 10 and extending to page 8 at line 4 have been amended as follows:

FIG. 1 is a schematic view of an ITSP system according to a preferred embodiment of the present invention. With reference to FIG. 1, the ITSP system comprises an ITS server system 1 and internet [user's] users' computer systems 3a...3n which are connected to the ITS server system 1 through the internet 5.

The ITS server system 1 provides an internet telephone service through the internet 5 and is a means for hosting the advertisements described in a method of advertising according to the present invention. The internet telephone service transmits voice signals through the internet 5, thus enabling long distance calls to be made via the internet 5. Internet long distance phone calls cost less than traditional long distance phone [calls and as a result] calls, and as a result, internet telephony has proved to be an attractive internet application.

The internet telephone service can be divided generally into two modes: computer-to-computer mode and [computer-to- telephone] computer-to-telephone mode. The computer-to- computer mode uses a method by which the ITS server system 1 takes a package of voice signals and transmits the package from one computer system to another computer system through the internet 5. The computer-to-telephone mode uses a method by which the ITS server system 1 takes a package of voice signals and transmits the package through the internet 5 from a computer system to a public switched telephone network (PSTN).

FIG. 2 is a block diagram illustrating functions of the ITS server system 1 (of FIG. 1). With reference to FIG. 2, the ITS server system 1 [and] comprises a

customer database 20, an internet telephone service database 21, a banner advertisement database 22, a moving picture advertisement database 23, and a web page database 24 as a server storage part. The ITS server system 1 is preferably divided into separate servers: an ITSP server 27, a banner advertisement server 28, and a moving picture advertisement server 29.

The four (4) paragraphs beginning on page 8 at line 21 and extending to page 9 at line 11 have been amended as follows:

The moving picture advertisement database 23 ~~[store]~~ stores a multitude of moving picture advertisements that are the object data of the method of providing data according to the present invention. The moving picture advertisements are realized as real pictures having sound.

The web page database 24 stores a web page that will be transmitted to the internet ~~[user's]~~ users' computer systems 3a...3n and a first client program 25. The web page comprises an interface web page for displaying the internet telephone service providing screen on the display units of the internet ~~[user's]~~ users' computer systems 3a...3n in order to provide the internet telephone service. In the interface web page includes the second client program 26.

The second client program 26, which runs on the internet ~~[user's]~~ users' computer systems 3a...3n, calls a moving picture advertisement and displays the called moving picture advertisement to be synchronized with a corresponding banner advertisement on the internet telephone service providing screen. In the present example, the second client program 26 is realized using a Java applet or JavaScript; however, it may be coded using other programming languages.

The first client program 25, which runs on the internet ~~[user's]~~ users' computer systems 3a...3n, requests and receives a moving picture advertisement from the moving picture advertisement server 29. The first client program 25 may be made from various programming languages and is realized in the present example using an ActiveX control which is a kind of Dynamic Link Library (DLL). An ActiveX control can be created using any programming language that supports Microsoft's COM (Component Object Module), including commonly used Visual Basic and C++.

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The single paragraph beginning on page 9 at line 17 and extending to page 9 at line 20 has been amended as follows:

The banner advertisement server 28 extracts from the banner advertisement database 22 a banner advertisement that is requested by the second client program 26, which runs on the internet [user's] users' computer systems 3a...3n, and transmits the banner advertisement.

The single paragraph beginning on page 9 at line 31 and extending to page 10 at line 4 has been amended as follows:

FIG. 4 is a schematic diagram of the computer systems 3a...3n of FIG. 1. With reference to FIG. 4, each of the computer systems 3a...3n includes a hard disk and memory as a storage part, a computer main unit 43 equipped with a processor for executing the first and second client programs 25 and 26 in connection with the hard disk and memory, a display unit 42, a keyboard 48, and a mouse 46 containing a mouse button.

The single paragraph beginning on page 11 at line 14 and extending to page 11 at line 24 has been amended as follows:

FIG. 8 is a lookup table for determining an appropriate moving picture advertisement frame set corresponding to the data reception speed of an internet [user user's internet connection, both of which are stored in the moving picture database 23. With reference to FIG. 8, if the internet user's computer system is connected to a low speed network, such as a PSTN, and the data reception speed is "less than ooo", the smallest subdata file, moving picture frame set a, is transmitted. If the data reception speed is "ooo-\*\*\*", moving picture frame set b is transmitted. If the internet user's computer system is connected to a high speed network and the data reception speed is "more than \*\*\*", moving picture frame set c is transmitted. As such, even if internet users are connected to a low speed network, an excessive amount of time is not spent downloading the moving picture advertisement.

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The single paragraph beginning on page 13 at line 11 and extending to page 13 at line 20 has been amended as follows:

FIG. 12 is a flow chart explaining in detail the transmission procedure of the moving picture advertisement of FIG. 11 according to an embodiment of the method of providing data of the present invention. With reference to FIG. [12, while] 12, while the speed sensing module 51 of the first client program 25 transmitted in step 1105 (of FIG. 11) determines the data reception speed of each of the internet users' computer systems 3a...3n, the data requesting module 52 requests a moving picture advertisement list from the moving picture advertisement server 29. In response to the request, the moving picture advertisement server 29 transmits the moving picture advertisement list to the internet [user's] users' computer systems 3a...3n in step 1201.

The single paragraph beginning on page 15 at line 3 and extending to page 15 at line 12 has been amended as follows:

FIG. 13 is a flow chart that explains the deletion procedure of the moving picture advertisement by the deleting module 53 of the first client program 25. With reference to FIG. 13, the data deleting module 53 compares the moving picture advertisements in the moving picture advertisement list received from the moving picture advertisement server 29 with the moving picture advertisements stored in the computer main unit 43. If a stored moving picture advertisement is not listed in the moving picture advertisement list, it is deleted. That way, if the advertisement period is completed or a moving picture advertisement is replaced, the moving picture advertisement that will no longer be displayed is deleted, so as to minimize storage space usage of each of the internet [user's] users' computer systems 3a...3n.

The single paragraph beginning on page 15 at line 15 and extending to page 15 at line 22 has been amended as follows:

FIG. 14 is a flow chart that explains the procedures executed by the second client program. With reference to FIG. 14, the calling module 61 of the second client program 26 confirms receipt of the moving picture advertisement that has

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been completely downloaded by the first client program 25, and requests the banner advertisement server 28 for the banner advertisement corresponding to the downloaded moving picture advertisement in step 1401. In response to this request, the banner advertisement server 28 transmits the requested banner advertisement to the internet [user's] users' computer systems 3a...3n.

## IN THE CLAIMS:

Claims 7, 8 and 18 have been amended herein as follows:

7. (As Amended Herein) The moving picture advertisement method of claim 6, wherein the moving picture advertisement is transmitted from the ISP [server and] server, and the ISP server extracts a moving picture advertisement frame set corresponding to the data reception speed of an internet user's internet connection among a multitude of moving picture advertisement frame sets and transmits it.

8. (As Amended Herein) An ISP server system that is connected to an internet user's computer system through the internet, the ISP server system comprising:

(a) a server storage part where a multitude of subdata of different file sizes are stored; and

(b) a server part that receives a data reception speed of an internet user's internet connection, extracts from a database a predetermined subdata which corresponds to the received data reception speed, and transmits the extracted subdata to an internet user's computer system.

18. (As Amended Herein) A computer-readable recording medium [that] comprising:

(a) data sensing module for detecting a data reception speed of an internet user's internet connection; and

(b) a data requesting module that provides the ISP server with the data reception speed of an internet user's internet connection and that



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receives from the ISP server a selected subdata chosen in consideration of  
the data reception speed among a multitude of subdata of different file sizes.

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